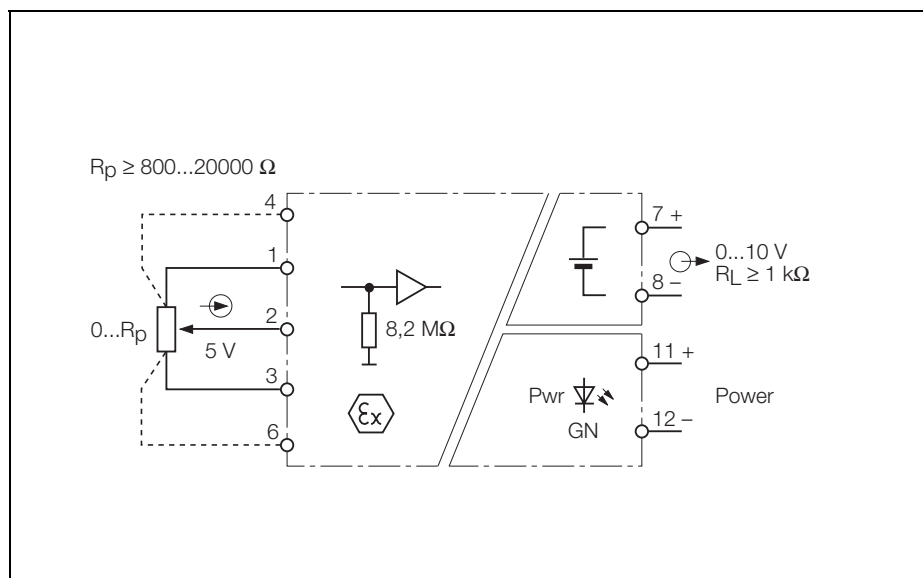


The 1-channel potentiometer transducer IM36-11EX-1/24VDC isolates signals from 3-wire or 5-wire potentiometers and transfers these as standard analog signals from the Ex to the safe area. The resistance value of the potentiometer's wiper contact, ranging from 0 Ω to the nominal resistance value (final value) of the potentiometer, is detected and processed linearly (see fig.).

A potentiometer is defined by its nominal value. Any potentiometer with a nominal resistance value within a range of 800...20000 Ω may be connected. Thus common potentiometer types, e.g. with a

nominal resistance value of 1 k Ω or 10 k Ω , may be used. The permissible line resistance may not exceed 50 Ω at a potentiometer resistance of 800 Ω .

The devices feature galvanic isolation between input circuit, output circuit and power supply.

The device is equipped with one voltage output (0...10 V).

A green LED indicates operational readiness.

- **Intrinsically safe input circuits EEx ia**
- **Application area according to ATEX : II (1) G**
- **transmission of potentiometer signals from the explosion hazardous area**
- **potentiometer resistance rating: 800...20 k Ω**
- **Output circuit: 0...10 VDC**
- **Removable terminal blocks**
- **Galvanic isolation of input circuits, output circuits and supply voltage**

potentiometer amplifiers

IM36-11EX-U/24VDC

Type	IM36-11EX-U/24VDC		
Ident-No.	7509526		
Operational voltage range:	19 ... 29 VDC		
Input circuits	Potentiometer		
Potentiometer input			
Potentiometer			
Cable resistance	≤ 50 Ω		
Voltage on resistor	5 VDC		
Nominal resistance	800...20000 Ω kΩ		
Ex approval acc. to conformity certificate			
Ex approval acc. to conformity certificate	TÜV 99 ATEX 1405		
Application area	II (1) G		
Protection type	[EEx ia] IIC		
Max.output voltage U _o	≤ 13.8 V		
Max. output current I _o	≤ 35 mA		
Max. output power P _o	≤ 121 mW		
Characteristic	Linear		
External inductance/capacitance L _o /C _o		EEx ia IIC	EEx ia IIB
	Lo [mH]	20,0	100,0
	Co [nF]	760	4900
Degree of protection			
IP20			
Housing length	104 mm		
Housing width	18 mm		
Housing height	110 mm		
Weight	125 g		
Mounting instruction	Mounting on DIN rail or mounting panel		
Housing material	polycarbonate/ABS		
Electrical connection	4 x 3-pole removable terminal blocks, reverse polarity protected, screw connection		
Terminal cross-section	1 x 2.5 mm ² / 2 x 1.5 mm ²		

Dimensions

